base. Breeding occurs each year with equal success in either male or female 'owned' enclosures. An alternate corridor route, opened each September, allows flighted young to vacate parental territories and travel to a more remote overwintering enclosure (with live prey predation and early spring release). Parents do not follow their young. Finally, most corridors are closed again by November when the adults have established winter routines. By this time there is no evidence for recognition of partners of the previous spring.

TRACKING THE MIGRATIONS OF 30 RAPTORS BY SATELLITE

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During the period July 1992 to July 1994 we fitted 30 eagles (10 *Aquila nipalensis,* 10 *A. pomarina,* three *A. clanga,* four *A. heliaca,* one *A. wahlbergi,* one *Haliaeetus albicilla* and one *H. pelagicus*) with satellite transmitters (PTTs) of different sizes (28–95 g). All steppe eagles were caught in Saudi Arabia in October except one immature which was caught in March. All young and most adult steppe eagles migrated into Africa via Bab el Mandeb. From there they dispersed in various directions. One adult and one immature bird turned north and wintered in Ethiopia, Sudan and Chad. One adult female was tracked for over 15 000 km all the way from Saudi Arabia to southern Africa and back to its breeding grounds in Kazakhstan via Suez and Eilat. It stayed in its wintering grounds from 22 November until 29 January, spending most of the time in Botswana. The spring migration lasted from 1 February until 24 March. An adult greater spotted eagle wintered in southwestern Saudi Arabia from 29 October until 24 November, afterwards in northern Yemen east of Saana. It departed on 2 February and arrived in its breeding grounds in western Siberia northwest of Omsk on 21 April. A young lesser spotted eagle from Latvia took one month to arrive in the largest African wetland area, the Sudd in Sudan (ca. 6000 km from the breeding area), where it remained for over 6 wk. It then went into the Serengeti NP and Masai Mara Reserve on the border of Tanzania and Kenya. A new generation of solar-powered transmitters has become available in 1993 which gives some hope that the movements of at least large species could be studied in greater detail and for longer periods in the future. Such a transmitter has been fitted to a juvenile sea eagle in Germany. During the first year of its life 877 satellite locations were obtained, each location corresponding to a customarily obtained "recovery" of a ringed bird. Many of the PTTs are still presently active.

NEST SITE MACROHABITAT SELECTION BY WOODLAND HAWKS ON A MANAGED FOREST IN THE GEORGIA PIEDMONT

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In the southeastern United States, major emphasis in forest management is directed toward increased timber production. If wildlife management and increased timber production are to coexist, relationships between wildlife habitat preferences and silvicultural practices must be better understood. Previous research on woodland hawks determined that nest site selection occurs at a microhabitat level. However, it is difficult for a land manager to select for habitat characteristics on a small scale. It is more practical to design management schemes that aim for critical macrohabitat types. In 1994, 12 red-shouldered hawk (*Buteo lineatus*) and 10 red-tailed hawk (*B. jamaicensis*) nests were located on a 5000-ha wildlife management area in the Georgia Piedmont. Nest site macrohabitat preferences were examined using a geographic information system (GIS). Hardwood habitat was separated into upland and bottomland macrohabitat types, and pine habitat was separated by age and structural characteristics into six macrohabitat types. Using the GIS, three concentric circles of increasing size were created around each nest. Macrohabitat percentages within each concentric circle were compared to total percentages available on the study area. Circle macrohabitats that occurred in higher proportions than expected based on total availability were considered critical.

BREEDING BIOLOGY AND NEST SUCCESS OF FLORIDA'S CRESTED CARACARAS

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Breeding chronology, nest success, and productivity of the crested caracara (*Caracara plancus*) in southcentral Florida were examined for 28 nests during the 1993–94 breeding season. Reproductive activity was documented from October through June; peaks of the incubation, nestling, and fledging periods occurred in January, February, and early April respectively. Nests were monitored weekly to determine clutch size, laying, hatching, and fledging dates. I estimated weekly Mayfield and traditional nest success and survival probabilities for the incubation, nestling, and fledgling dependency (8 wk postfledging) periods for each nest. Total Mayfield probability of success for each period was 0.74, 1.00, and 0.90 respectively and for all three periods combined for 28 nests was 0.66. Twenty-five nests successfully fledged young (89%), two failed during incubation, and one failed just after fledging. Most nests produced two fledglings (53%). At five nests (18%), three fledglings were successfully raised to the end of the fledgling dependency period. Productivity for all nests was 1.6. Survival probabilities were also estimated for each egg for all three periods. We documented three cases of double brooding; in all cases the fledglings from the first nest